



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,241	01/22/2004	Hiroshi Wada	248071US0CONT	2022
22850	7590	03/15/2005		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER COONEY, JOHN M	
			ART UNIT 1711	PAPER NUMBER
DATE MAILED: 03/15/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/761,241

Applicant(s)

WADA ET AL.

Examiner

John m Cooney

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21, 22 and 24-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21, 22 and 24-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f):
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 10/304,969.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>0205</u> . | 6) <input type="checkbox"/> Other: _____ |

ie

Applicant's arguments filed 11-15-04 have been fully considered but they are not persuasive.

Rejection of claim 23 under 35 USC 112 is hereby withdrawn in light of applicants' amendment canceling this claim.

The following rejections are either maintained or set forth as new:

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 21, 22, and 24-39 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicants' written description fails to adequately describe the modified crude MDI's (PMDI) of their invention so as to enable clear determination of the elements set forth in the claims. For example, in the isocyanate preparation defined in the paragraph bridging pages 21 and 22, it is not seen how the formed, apparently end-capped, partially monofunctionalized PMDI materials are defined to be prepolymers,

Art Unit: 1711

and, accordingly, determination of the intended meaning of the modified polymers and the prepolymers encompassed within the broader language of the claims can not be determined to the degree required under 35 USC 112 1st paragraph.

Applicants' arguments have been considered, but the disclosure indicated at page 11 and 12 does not serve to clarify the concerns regarding "modified polymethylenepolyphenyl polyisocyanate" or "prepolymer-modified polymethylene-polyphenyl polyisocyanate". Nothing more can be determined from applicants' supporting disclosure except that "modification", in some shape or form, not described, is being performed upon the isocyanates described. Applicants can not look to the disclosures of the prior art to breath life into their supporting disclosure, nor can they look to disclosures of the prior art and their presentation in order to substantiate limitations of their claims.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 21, 22, 24-39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "modified" in claim 21 is a relative term which renders the claim indefinite. The term "modified" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the

art would not be reasonably apprised of the scope of the invention. The employment of "modified" before the term "polymethylenepolyphenyl polyisocyanate" is confusing as to intent because it can not be determined what degree of modification can be deemed a modification meeting the metes and bounds of the claims.

Claim 22 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "modified" in claim 22 is a relative term which renders the claim indefinite. The term "modified" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The employment of "modified" in employment of reciting "prepolymer-modified polymethylene-polyphenyl polyisocyanate" is confusing as to intent because it can not be determined what degree of modification can be deemed a modification meeting the metes and bounds of the claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 1711

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 21, 22, and 24-39 are rejected under 35 U.S.C. 102(b) as being anticipated by Takeyasu et al.(5,093,380).

Takeyasu et al. discloses preparations of flexible polyurethane foams by mixing and reacting polyols of low-unsaturation and hydroxyl values as claimed which may also contain polymers dispersed within and are prepared using the double metal cyanide catalysts, modified crude MDI as claimed, catalysts, blowing agents, and silicone stabilizers as claimed (see the entire document).

While Takeyasu et al.'s disclosure may be directed towards closed mold operations, the reference is encompassing of combining and reacting the materials generally, and one would readily envision mixing and reacting the materials in an open state from the referenced teaching taken as a whole.

Applicants' arguments have been considered, but rejection is maintained for the reasons set forth above. As indicated above, examiner does not give the term "modified" the same meaning assessed by applicants above, and the reference indicates modification to a degree necessary to meet the limits of applicants' claims. The arguments directed towards unexpected results are not persuasive because rejection is maintained to be proper under 35 USC 102. Examiner maintains the disclosure of the reference to be adequate in its disclosure of the materials claimed to be supportive of a rejection under 35 USC 102. Regarding the molding limitations, in

Art Unit: 1711

addition to the remarks set forth in the previous Office action, it is maintained that although Takeyasu et al. may highlight a closed mold in one embodiment of their disclosure, its full disclosure readily envisions simple mixing in an open area, and such a limitation is not seen to be a distinction over what is fully taught by the teachings of Takeyasu et al.

Claims 21, 22, and 24-39 are rejected under 35 U.S.C. 102(b) as being anticipated by EP-1,022,300 A1.

EP-1,022,300 A1 discloses preparations of flexible polyurethane foams by mixing and reacting polyols of low-unsaturation and hydroxyl values as claimed which may also contain polymers dispersed within and are prepared using the double metal cyanide catalysts, modified crude MDI as claimed, catalysts, blowing agents, and silicone stabilizers as claimed (see the entire document).

EP-1,022,300 explicitly acknowledges that its procedures may be carried out by a method of spreading a reactive mixture into a mold in an open state (see again paragraph [0083]), and such a disclosure can not be ignored because the reference exemplifies closed molding applications.

Applicants' arguments have been considered, but rejection is maintained for the reasons set forth above. As indicated above, examiner does not give the term "modified" the same meaning assessed by applicants above, and the reference

Art Unit: 1711

indicates modification to a degree necessary to meet the limits of applicants' claims.

The arguments directed towards unexpected results are not persuasive because rejection is maintained to be proper under 35 USC 102. Examiner maintains the disclosure of the reference to be adequate in its disclosure of the materials claimed to be supportive of a rejection under 35 USC 102.

The following is set forth as new:

Claims 21, 22, and 24, 27-29, 32-35 and 37-39 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohkubo et al.(5,777,175){equivalent to CN-'408 & EP-'543 – see IDS}.

Ohkubo et al. discloses preparations of flexible polyurethane foams by mixing and reacting polyols having hydroxyl values as claimed which may also contain polymers dispersed within and are prepared using modified isocyanates as claimed, catalysts, blowing agents, and silicone stabilizers as claimed (see the entire document).

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA

Art Unit: 1711

1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 21, 22, and 24-39 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-41 of U.S. Patent No. 6,734,219. Although the conflicting claims are not identical, they are not patentably distinct from each other because the copending claims disclose preparations of flexible polyurethane foams which are prepared by mixing and reacting polyols, PMDI, catalysts, blowing agents and materials wherein difference in the selection of particular "modified" isocyanates would have been obvious selections taking the teachings and suggestion of the claims and the portions of the supporting disclosure which provide support for the claims of the patent (see column 4 line 58 – column 5 line 10).

Applicants' arguments regarding variations of claim limitations have been considered, but rejection is maintained to be evident as set forth above and teaching and suggestion evident as set forth above.

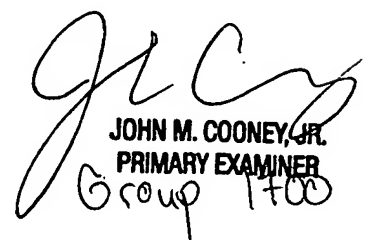
Claims 21, 22, and 24-39 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9 of U.S. Patent No. 6,653,362. Although the conflicting claims are not identical, they are not patentably distinct from each other because the copending claims disclose preparations of flexible polyurethane foams which are prepared by mixing and reacting polyols, PMDI, catalysts, blowing agents and materials wherein combinations of materials and respective features vary in a manner which would have been obvious to one having ordinary skill in the art and wherein difference in the selection of particular "modified" isocyanates would have been obvious selections taking the teachings and suggestion of the claims and the portions of the supporting disclosure which provide support for the claims of the patent (see column 9 line 15-35).

Applicants' arguments regarding variations of claim limitations have been considered, but rejection is maintained to be evident as set forth above and teaching and suggestion evident as set forth above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Cooney whose telephone number is 571-272-1070. The examiner can normally be reached on M-F from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck, can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


JOHN M. COONEY, JR.
PRIMARY EXAMINER
Group 1700